Application No.: 10/519,436 Docket No.: TIP 0015USPCT EFS Filing Date: April 18, 2008

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

- 1. (Canceled)
- 2. (Currently amended) A method for evaluating the effectiveness of an HIV reverse transcriptase inhibitor <u>excluding AZT</u> as an anti HIV therapy for a patient infected with at least one mutant HIV strain comprising:
 - (i) collecting a sample from an HIV-infected patient;
- (ii) determining whether the sample comprises a nucleic acid encoding HIV reverse transcriptase having at least one mutation at the position 194, wherein the wild type amino acid is mutated to glycine as compared to the wild-type HIV strain HIB/LAI;
- (iii) correlating the presence of said at least one mutation of step (ii) to a change in effectiveness of said HIV reverse transcriptase inhibitor;
- (iv) (iii) determining introducing the effectiveness of said HIV reverse transcriptase inhibitor to said sample containing said mutation; and
- (v) (iv) comparing the effectiveness of said inhibitor in <u>said</u> samples containing said reverse transcriptase mutation, with <u>a samples not</u> containing <u>no</u> said mutation.; <u>and</u>
- (v) correlating the presence of said at least one mutation of step (ii) to a change in effectiveness of said HIV reverse transcriptase inhibitor.
- 3. to 4. (Canceled)
- 5. (Currently amended) A method for evaluating a change in anti HIV drug susceptibility of an HIV reverse transcriptase inhibitor excluding AZT comprising:
 - (i) collecting a sample from an HIV-infected patient;

Application No.: 10/519,436 Docket No.: TIP 0015USPCT EFS Filing Date: April 18, 2008

(ii) determining whether the sample comprises an HIV reverse transcriptase having at least one mutation at the position 194, wherein the wild type amino acid is mutated to glycine as compared to the wild-type HIV strain IIIB/LAI;

- (iii) correlating the presence of said at least one mutation of step (ii) to a change in anti HIV drug susceptibility;
- (iv) (iii) determining introducing the effectiveness of a said reverse transcriptase inhibitor to said sample containing said mutation; and
- (v) (iv) comparing the anti HIV drug effectiveness in <u>said</u> samples containing said reverse transcriptase mutation with <u>a samples</u> not containing said mutation; and
- (v) correlating the presence of said at least one mutation of step (ii) to a change in susceptibility of said HIV reverse transcriptase inhibitor.